



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D4838-1

Job Sheet 197333



Part No: D4838-1

Job Qty: 16 pcs

Part Name: Upper Cutter Body, LH



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 7/4/19

Job Tracking No:

Due Date: 10/18/19 *Sept 13*

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG REV A SHEETS 1,2,3 IPP REV: A NEW ISSUE JFS 13/04/26 VERIFY BY: JLM

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Bandsaw - 1	16 pcs		10/18/19	0.00	0.08	Bandsaw - 1		<i>mm. 2019/08/27</i>
110	HAAS 4 Axis - B4B	16 pcs		10/18/19	0.58	28.07	HAAS - 1 - B4B		
							HAAS - 2 - B4B		
							HAAS - 3 - B4B		
							HAAS - 4 - B4B		<i>mm. 2019/08/27</i>
120	QC 2	16 pcs		10/18/19	0.00	0.00	QC 2 - 1		
							QC 2 - 12		
							QC 2 - 14		
							QC 2 - 17		
							QC 2 - 19		
							QC 2 - 2		
							QC 2 - 20		
							QC 2 - 22		
							QC 2 - 23		
							QC 2 - 25		
							QC 2 - 32		
							QC 2 - 33		
							QC 2 - 35		
							QC 2 - 39		
							QC 2 - 4		
							QC 2 - 40		
							QC 2 - 44		
							QC 2 - 45		
							QC 2 - 48		
							QC 2 - 49		
							QC 2 - 50		

DAS
64
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130	QC 8	16 pcs	10/18/19	0.00	0.00	QC 2 - 63	
						QC 2 - 8	
						QC 2 - 66	
						QC 2 - 64	mm. 2019/08
						QC 2 - 65	
						QC 2 - 5	
						QC 2 - 71	
						QC 2 - 73	
						QC 2 - 69	
						QC 8 - 12	
						QC 8 - 14	
						QC 8 - 17	
						QC 8 - 20	
						QC 8 - 25	
						QC 8 - 3	
						QC 8 - 32	
						QC 8 - 33	
QC 8 - 35							
QC 8 - 39							
QC 8 - 4							
QC 8 - 44							
QC 8 - 45							
QC 8 - 49							
QC 8 - 58							
QC 8 - 8							
QC 8 - 9							
QC 8 - 68							
QC 8 - 67							
QC 8 - 1 (A)							
QC 8 - 47							
QC 8 - 40	DAS						
QC 8 - 52	52						
QC 8 - 23	9-89						
QC 8 - 57	17/08/18						
140	Outsource - 4 - Anodize	16 pcs	10/18/19			ATG001-VC	2019-08-29
150	Packaging 2-1 - Receive - B4B	16 pcs	10/18/19	0.00	0.00	Packaging 2 - 1 - B4B	
						Packaging 2 - 2 - B4B	
						Packaging 2 - 3 - B4B	
						Packaging 2 - 5 - B4B	
						Packaging 2 - 4 - B4B	
						Packaging 2 - 6 - B4B	
						Packaging 2 - 7 - B4B	
						Packaging 2 - 8 - B4B	
						Packaging 2 - 9 - B4B	
						Packaging 2 - 10 - B4B	
						Packaging 2 - 11 - B4B	
						Packaging 2 - 12 - B4B	
						Packaging 2 - 13 - B4B	DP
						Packaging 2 - 14 - B4B	SEP 12 2019
						Packaging 2 - 15 - B4B	
						Packaging 2 - 16 - B4B	
						Packaging 2 - 17 - B4B	
						Plex 7/4/19 1:56 PM	Dart.lajeunesse.marie

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Mm. 2019/08/27

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9-89

17/08/18

2019-08-29

SEP 12 2019

7/4/2019

[Dart Hawkesbury] Job Sheet - Lajeunesse, Marie

				Packaging 2 - 18 - B4B	
				Packaging 2 - 19 - B4B	
				Packaging 2 - 20 - B4B	
				Packaging 2 - 21 - B4B	
				Packaging 2 - 22 - B4B	
				Packaging 2 - 23 - B4B	
				Packaging 2 - 24 - B4B	
				Packaging 2 - 25 - B4B	
				Packaging 2 - 26 - B4B	
				Packaging 2 - 27 - B4B	
				Packaging 2 - 28 - B4B	
				Packaging 2 - 29 - B4B	
				Packaging 2 - 30 - B4B	
				Packaging 2 - 31 - B4B	
				Packaging 2 - 32 - B4B	
				Packaging 2 - 33 - B4B	
				Packaging 2 - 34 - B4B	
				Packaging 2 - 35 - B4B	
				Packaging 2 - 36 - B4B	
155	QC 6	16 pcs	10/18/19	0.00 0.00	QC 6 - 9
					QC 6 - 68
					QC 6 - 61
					QC 6 - 40
180	Packaging 3-1 - Stock - B4B	16 pcs	10/18/19	0.00 0.00	Packaging 3 - 1 - B4B
					Packaging 3 - 2 - B4B
					Packaging 3 - 3 - B4B
					Packaging 3 - 4 - B4B
					Packaging 3 - 5 - B4B
					Packaging 3 - 6 - B4B
					Packaging 3 - 7 - B4B
					Packaging 3 - 8 - B4B
					Packaging 3 - 9 - B4B
					Packaging 3 - 10 - B4B
					Packaging 3 - 11 - B4B
					Packaging 3 - 12 - B4B
					Packaging 3 - 13 - B4B
					Packaging 3 - 14 - B4B
					Packaging 3 - 15 - B4B
					Packaging 3 - 16 -

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				B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
190 QC 21 - SA	16 pcs	10/18/19	0.00 0.00	QC 21 - SA - 21	
				QC 21 - SA - 70	DAS
				QC 21 - SA - 53	21 9-89 OCT 02 2010

Part Op 100 - (Bandsaw) Cut Blank at 4.500"

Descriptions: 110 - (HAAS CNC Vertical Machine) 1-Machine per folio FB190

120 - (QC2- Inspect parts off machine FAI/FAIB)

130 - (QC8- Inspect parts - second check)

140 - Issue P/O: 44317 ATG, Hard Black Anodize and Prime as per Dwg D4838-1 Rev. A

150 - (Receive & Inspect for Damage & Mat'l Certs)

155 - QC6- All purchased or subcontracted products

180 - (Identify as per dwg & Stock Location: _____)

190 - (QC21- Final Inspection - Work Order Release)

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
M7075T6B1.000X7.000	7075-T6 Bar 1.000" X 7.000" see mat'l M7075T6S1.000X7.000	6 ft (.375 ea)	100-Bandsaw - 1	5017360
				4x 5056425

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Bandsaw - 1	M7075T6B1.000X7.000	6	0	0

DAS
21MAT
used
6.000'

Part Specifications

Specifications could not be found.

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DART AEROSPACE LTD		Work Order: 197333
Description: Upper Cutter Body, LH		Part Number: D4838-1
Inspection Dwg: D4838	Rev: A	Page 1 of 1

INSPECTION SHEET

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.130 x 45°	+/-0.030 x +/-0.5°	0.130 x 45°	✓		Vernier	
4.18	+/-0.030	4.179	✓		high gauge	
7.03	+/-0.030	7.029	✓		vernier	
0.60	+/-0.030	.595	✓		vernier	
0.74	+/-0.030	.740	✓		high gauge	
1.40	+/-0.030	1.399	✓		vernier	
2.44	+/-0.030	2.435	✓		high gauge	
R0.25	+/-0.030	R.250	✓		Gaborit	
23.7°	+/-0.5°	24°	✓		Gaborit	
30.2°	+/-0.5°	30°	✓		Gaborit	
0.168	+0.003/-0.000	.169	✓		vernier	
0.263	+0.002/-0.003	.260	✓		vernier	
0.272	+/-0.010	.274	✓		vernier	
6.625	+/-0.010	6.628	✓		vernier	
6.250	+/-0.010	6.246	✓		vernier	
4.167	+/-0.010	4.168	✓		vernier	
1.883	+/-0.010	1.884	✓		vernier	
Ø0.177	+0.005/-0.001	.177	✓		pin gauge	
0.400	+/-0.010	.403	✓		vernier	
0.360	+/-0.010	.361	✓		vernier	
4.560	+/-0.010	4.561	✓		vernier	
2.110	+/-0.010	2.111	✓		vernier	
2.400	+/-0.010	2.401	✓		vernier	

Measured by: MM. 64	Checked by: DAS 52	QC Inspector:
Date: 2019/08/23	Date: 19/08/23	Date:

Engineering Approval: (If necessary)	Date:
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Rev	Date	Change	Revised by	Approved
A	15.06.23	New Issue	KJ	

Entered: _____ Date: _____

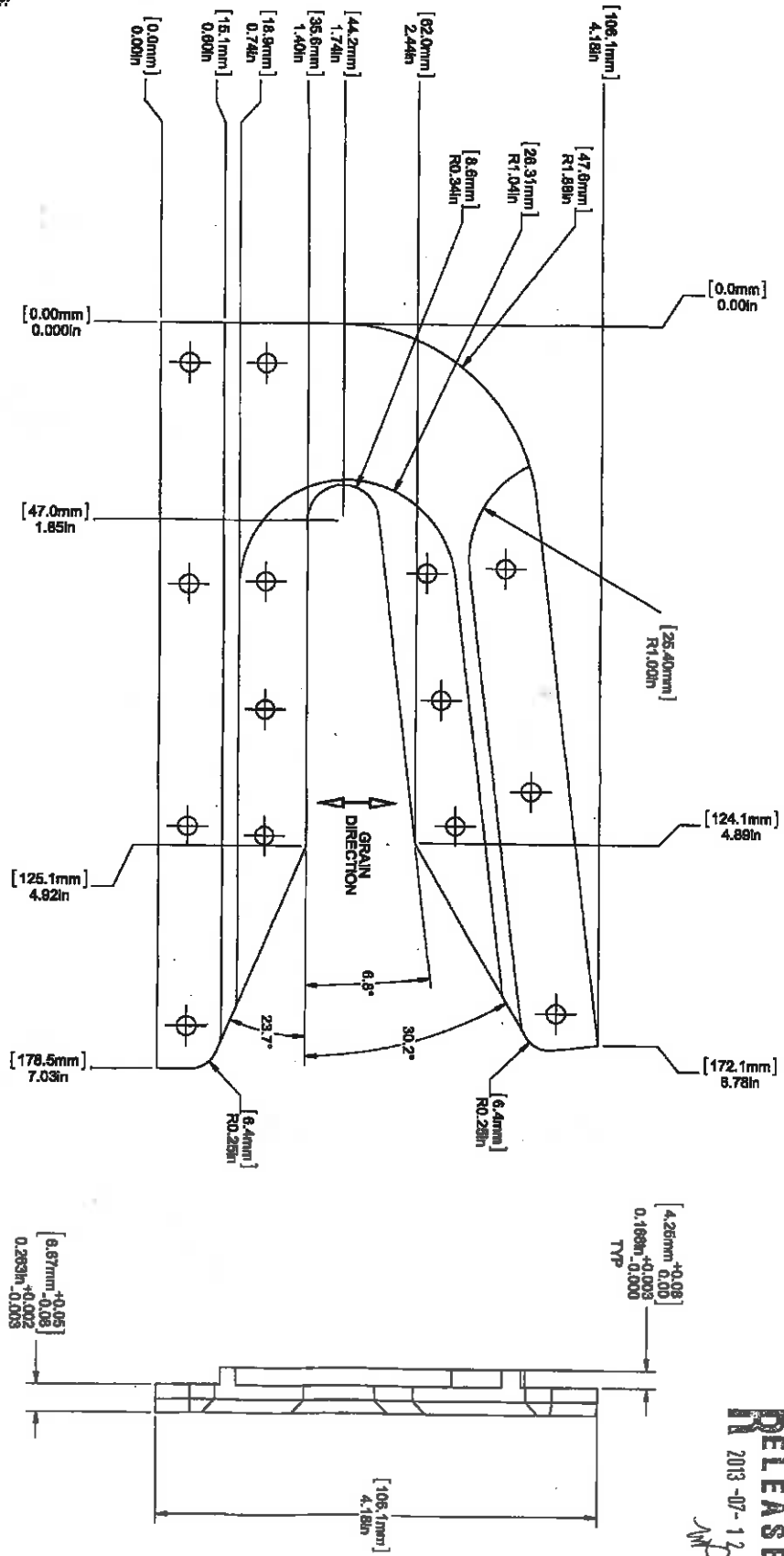
WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only



Job: _____ Part No. _____		DISPOSITION Rework ☐ ☐ Scrap ☐ ☐ Use-as-is ☐ ☐		DEPARTMENT/PROCESS Skid-tube ☐ ☐ ☐ ☐ ☐ Machining ☐ ☐ ☐ ☐ ☐ Large Fab ☐ ☐ ☐ ☐ ☐ Cross tube ☐ ☐ ☐ ☐ ☐ Small Fab ☐ ☐ ☐ ☐ ☐ Finishing ☐ ☐ ☐ ☐ ☐ Eng. (Non-AW) ☐ ☐ ☐ ☐ ☐ Prod. Eng. Coord. ☐ ☐ ☐ ☐ ☐ Rec/Store/Packaging ☐ ☐ ☐ ☐ ☐ Engineering ☐ ☐ ☐ ☐ ☐ Water Jet ☐ ☐ ☐ ☐ ☐ Supplier ☐ ☐ ☐ ☐ ☐ Quality ☐ ☐ ☐ ☐ ☐																																																																											
Date : _____		Sequence #: _____		QTY Affected : _____		MRB (QS1042) _____																																																																									
Description Work Order Deviation				Disposition																																																																											
Root Cause <table border="1"> <tr> <td>Operator</td> <td>☐</td> </tr> <tr> <td>Manufacturing Process</td> <td>☐</td> </tr> <tr> <td>Equip/Tooling</td> <td>☐</td> </tr> <tr> <td>Handling/Preservation</td> <td>☐</td> </tr> <tr> <td>Material</td> <td>☐</td> </tr> <tr> <td>Product Improvement</td> <td>☐</td> </tr> <tr> <td>Process Improvement</td> <td>☐</td> </tr> <tr> <td>Human Factors</td> <td>☐</td> </tr> </table>				Operator	☐	Manufacturing Process	☐	Equip/Tooling	☐	Handling/Preservation	☐	Material	☐	Product Improvement	☐	Process Improvement	☐	Human Factors	☐	FAULT CATEGORY <table border="1"> <tr> <td>Pressure/Forced</td> <td>☐</td> <td>Contamination</td> <td>☐</td> <td>Power Loss/Surge</td> <td>☐</td> <td>Positioned Wrong</td> <td>☐</td> </tr> <tr> <td>Bending</td> <td>☐</td> <td>Misaligned/off center</td> <td>☐</td> <td>Folio/Program</td> <td>☐</td> <td>Outside Tolerance</td> <td>☐</td> </tr> <tr> <td>Crushing</td> <td>☐</td> <td>BOM/Route</td> <td>☐</td> <td>Grain Direction</td> <td>☐</td> <td>Drawing</td> <td>☐</td> </tr> <tr> <td>Cracks</td> <td>☐</td> <td>Broken/Damage/Defect</td> <td>☐</td> <td>Weld</td> <td>☐</td> <td>Finish</td> <td>☐</td> </tr> <tr> <td>Crimp/Kink/Ripple/Wave/Twist</td> <td>☐</td> <td>Incomplete/Unclear Instructions</td> <td>☐</td> <td>Wrong Stock Pulled</td> <td>☐</td> <td>Part Lost/Missing</td> <td>☐</td> </tr> <tr> <td>Marks/Chatter</td> <td>☐</td> <td>Drill Holes</td> <td>☐</td> <td>Out of Sequence</td> <td>☐</td> <td>Misread</td> <td>☐</td> </tr> <tr> <td>Mislabeled</td> <td>☐</td> <td>Fit/Function</td> <td>☐</td> <td>Off-set/Set-up</td> <td>☐</td> <td></td> <td></td> </tr> </table>				Pressure/Forced	☐	Contamination	☐	Power Loss/Surge	☐	Positioned Wrong	☐	Bending	☐	Misaligned/off center	☐	Folio/Program	☐	Outside Tolerance	☐	Crushing	☐	BOM/Route	☐	Grain Direction	☐	Drawing	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Finish	☐	Crimp/Kink/Ripple/Wave/Twist	☐	Incomplete/Unclear Instructions	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐	Marks/Chatter	☐	Drill Holes	☐	Out of Sequence	☐	Misread	☐	Mislabeled	☐	Fit/Function	☐	Off-set/Set-up	☐		
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Other/Details: _____																																																																															
Completed By _____				Lead hand / Supervisor _____																																																																											
QC / QA Coordinator _____				_____																																																																											

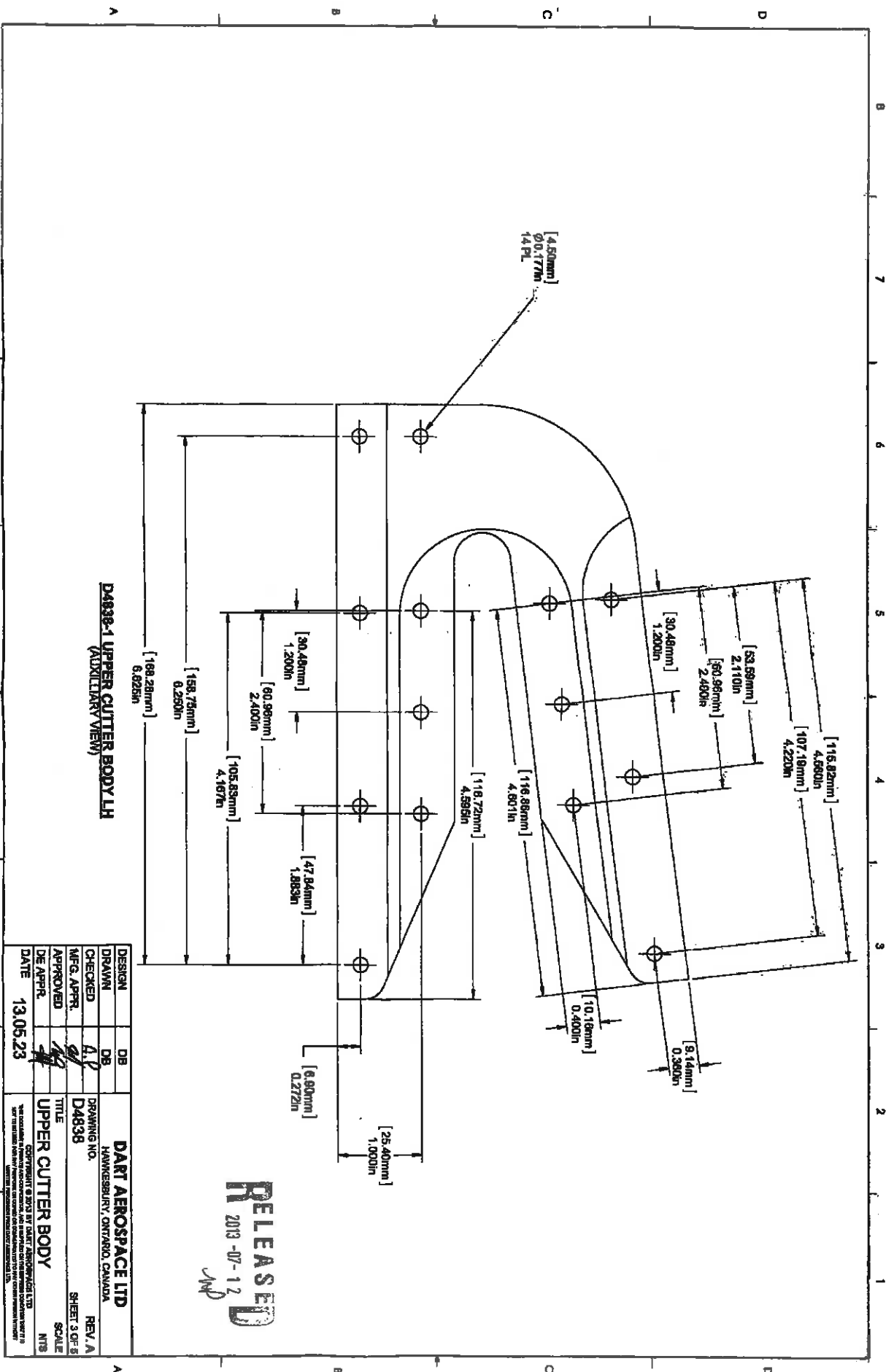


- NOTES:**
- 1) MATERIAL: 7075-T6 (OR 7661/7661/7661/7661) ALUMINUM BAR PER AMS-QQ-A-225/8 (OR AMS 4122/4123/4124/4125) OR PER AMS-QQ-A-200/1 (REF PART SPEC M7075/18) OR PRIME ALUMINUM MIL-A-8625 TYPE III, CLASS 2 COX OR BLACK.
 - 2) FINISH: HARD ANODIZE LAW MIL-A-8625 TYPE III, CLASS 2 COX OR BLACK.
 - 3) TOLERANCES: PER DAT 001 (1) UNLESS OTHERWISE NOTED.
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED. ALL METRIC DIMENSIONS ARE REFERENCE DIMENSIONS.
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX.
 - 6) IDENTIFICATION: NONE.
 - 7) WEIGHT: 0.57 LBS, 0.26 KGS.
 - 8) PART DIMENSIONS CONTROLLED BY CAD MODEL FILE: D4838-1-IGES

D4838-1 UPPER CUTTER BODY LH

DESIGN	DB	DATE	13.05.23
DRAWN	DB		
CHECKED	A.P.		
APPROVED	A.P.		
DE APPR	A.P.		
TITLE	UPPER CUTTER BODY		
DRAWING NO.	D4838		
REV. A	BREIT 2 OF 8		
SCALE	NTS		

RELEASED
R 2013-07-13
JMP





Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

POHB044377



Supplier: ATG001-VC
A.T.G. Industries Inc
731 INDUSTRIELLE ROAD
ROCKLAND
ON
K4K 1T2 Canada
Phone: 613-446-4544
Fax: 613-446-4556

Attention: Lalande, Marc-Andre

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: POHB044377

PO Date: 8/29/19

Due Date: 9/9/19

**Purchase Order
Revision:**

Revision Date:

Ship-To Contact: Guerin, Kimberley
Phone: 613-632-5200 Ext: 298
kguerin@dartaero.com

Via: Ground
Pymt Terms: Net 60

Freight Terms:

Special Comments:

E-MAILED
2019-09-04

Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	R199543	41232-200-002-005	Pivot Arm Issue P/O: Black Anodize as per Dwg 41232-200-005 MIL-A-8625- TYPE III, CLASS 2 Ensure Certificate of Conformity is attached	Firmed -		9/9/19	13 pcs	0 pcs	13 pcs	\$10.31/pcs	\$134.03
2	197333	D4838-1	Upper Cutter Body, LH : Various STC's Issue P/O: _____ ATG, Hard Black Anodize and Prime as per Dwg D4838-1 Rev. A	Firmed -		9/9/19	16 pcs	0 pcs	16 pcs	\$14.56/pcs	\$232.96
Grand Total:											\$366.99

Order Notes

Procurement Quality Clauses

A005 right of entry

A012 chemical and physical test report

A016 personnel qualification

A017 raw material identification (as applicable)

A022 Apical Processing

A024 process certifications

A026 certification of material conformance

A041 quality management system

A042 dart notification by supplier

A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 9/4/19 3:27 PM Dart.Guerin.Kimberley



A.T.G. Industries Inc.
760 Industrielle Street
Rockland, ON K4K 1T2
Canada

Ph: (613) 446-4544

Fax: (613) 446-4556

Pack List

Number: 918580

Date: 11-Sep-19

To

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ship To

Patrick Lussier
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ph: 613 632-9577

Fax: 613 632-1053

Ph: 613 632-9577

Fax: 613 632-1053

Terms		Ship Via	
		ATG Delivery	
Quantity	Description		
	Please reference this document's Pack List number on all correspondences regarding this shipment. If you have any questions, please contact us.		
16 ea	Part: D4838-1 Upper Cutter Body, LH Hard Black Anodize per MIL-A-8625F, Type III, Class2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0001-.0002" (1 - 2 mils) per drawing. Batch/Lot# <u>9731-F-319</u> <u>06/20</u> Job: 25867 PO: POHB044377	Rev: A	DAS 61 9-89
		Expiry Date:	
		Line: 2	
CERTIFICATE OF CONFORMANCE A.T.G Industries Inc. certifies that all items in this shipment conform to the requirements. Date: <u>SEP 11 2019</u> Certified Signature: <u>[Signature]</u> Receiver Signature: _____ A.T.G Industries Inc. is AS9100 Registered and Nadcap Chemical Processing Accredited. Note: This Packing Slip may contain parts that have been PLATED. Items that are plated may be subject to natural tarnishing and it is suggested that they be inspected within 24 hours of receipt.			
Made in Canada.			

RECEIVED

SEP 12 2019

DART AEROSPACE LTD.